P28954.A16

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants	: Izumi USUKI et al.	Confirmation No.: 4988
Serial No	: 10/560,312	Examiner: B. Ingvoldstad
Filed	: December 9, 2005	Group Art Unit: 2427
For	: METHOD AND APPARATUS FOR BROADCASTING TO A PORTABLE TERMINAL (as previously amended)	

INTERVIEW SUMMARY AND RESPONSE UNDER 37 C.F.R. §1.111

Commissioner of Patents
U.S. Patent and Trademark Office
Customer Service Window, Mail Stop Amendment
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir:

In response to the Office Action dated August 6, 2009, in which a three-month shortened statutory period was set to expire on November 6, 2009, Applicants respectfully request reconsideration and withdrawal of each of the outstanding rejections and objection in view of the herein-contained amendments and remarks.

AMENDMENTS TO THE CLAIMS

Upon entry of the present amendment, the status of the claims will be as is shown below. This listing of claims will replace all prior versions and listings of claims in the application.

Claims 1-11 (Cancelled)

12. (Currently Amended) A transmission method for transmitting a plurality of streams in a multiplexed format, comprising:

generating, using a multiplexer device, a transmission stream through multiplexing of a first stream having data of a first service, a second stream having data of a second service, and a third stream having data related to the first service and data related to the second service;

transmitting, using a transmitter, said transmission stream;

wherein said transmission stream has such a structure that ~~a~~ first ~~burst~~ bursts for transmitting the first stream and ~~a~~ second ~~burst~~ bursts for transmitting the second stream are located periodically in said transmission stream,

wherein each of at least one batch that concludes with a pause in transmission includes one of said first ~~burst~~ bursts and one of said second ~~burst~~ bursts ~~including content transmitted in batches in a period of time prior to a pause in transmission~~,

wherein said third stream is carried in said first ~~burst~~ bursts and also in said second ~~burst~~ bursts, and

wherein ~~each of~~ said first ~~burst~~ bursts and said second ~~burst carries~~ bursts carry all data related to ~~information of~~ the first service and the second service as carried in said third stream.

13. (Previously Presented) A transmission method as described in claim 12,

wherein said data for the first service is a high quality content data provided by said first service,

wherein said data for the second service is a high quality content data provided by said second service,

wherein said data related to the first service is a low quality content data provided by said first service, and

wherein said data related to the second service is a low quality content data provided by said second service.

14. (Previously Presented) A transmission method as described in claim 13,

wherein said high quality content data is data containing video data and audio data of the content.

15. (Previously Presented) A transmission method as described in claim 13,

wherein said low quality content data is data containing still image data and/or audio data related to the content.

16. (Previously Presented) A transmission method as described in claim 13,

wherein said low quality content data is data containing text data related to the content.

17. (Currently Amended) A transmission apparatus for transmitting a plurality of streams in a multiplexed format, comprising:

a multiplexer operable to generate a transmission stream through multiplexing of a first stream having data of a first service, a second stream having data of a second service, and a third stream having data related to the first service and data related to the second service; and

a transmitter operable to transmit said transmission stream;

wherein said transmission stream has such a structure that ~~a~~ first ~~burst~~ bursts for transmitting the first stream and ~~a~~ second ~~burst~~ bursts for transmitting the second stream are located periodically in said transmission stream,

wherein each of at least one batch that concludes with a pause in transmission includes one of said first ~~burst~~ bursts and one of said second ~~burst~~ bursts ~~including content transmitted in batches in a period of time prior to a pause in transmission~~,

wherein said third stream is carried in said first ~~burst~~ bursts and also in said second ~~burst~~ bursts, and

wherein ~~each of~~ said first ~~burst~~ bursts and said second ~~burst carries~~ bursts carry all data related to ~~information of~~ the first service and the second service as carried in said third stream.

18. (Currently Amended) A receiving method for receiving a transmission stream having a plurality of streams in a multiplexed format, said transmission stream being formed, using a multiplexer device, through multiplexing of a first stream having data of a first service, a second stream having data of a second service, and a third stream having data related to the first service and data related to the second service, said transmission stream having such a structure that ~~a~~ first ~~burst~~ bursts for transmitting the first stream and ~~a~~ second ~~burst~~ bursts for transmitting the second stream are located periodically in said transmission stream, each of at least one batch that concludes with a pause in transmission including one of said first ~~burst~~

bursts and one of said second ~~burst~~ bursts ~~including content transmitted in batches in a period of time prior to a pause in transmission~~, and said third stream being carried in said first ~~burst~~ bursts and also in said second burst, said receiving method comprising:

receiving said transmission stream, formed using the multiplexer device and transmitted using a transmitter, partially and selectively during a period at which the first ~~burst~~ bursts or the second ~~burst~~ bursts, being selected by a service recipient, ~~is~~ are transmitted;

extracting said third stream from the first ~~burst~~ bursts or the second ~~burst~~ bursts being received, and storing the extracted third stream; and

presenting said third stream when the service recipient alters the receiving service from the first service presented by the first ~~burst~~ bursts to the second service presented by the second ~~burst~~ bursts, or vice versa,

wherein ~~each of~~ said first ~~burst~~ bursts and said second ~~burst carries~~ bursts carry all data related to ~~information of~~ the first service and the second service as carried in said third stream.

19. (Currently Amended) A receiving apparatus for receiving a transmission stream having a plurality of streams in a multiplexed format, said transmission stream being formed through multiplexing of a first stream having data of a first service, a second stream having data of a second service, and a third stream having data related to the first service and data related to the second service, said transmission stream having such a structure that ~~a~~ first ~~burst~~ bursts for transmitting the first stream and ~~a~~ second ~~burst~~ bursts for transmitting the second stream are located periodically in said transmission stream, each of at least one batch that concludes with a pause in transmission including one of said first ~~burst~~ bursts and one of said second ~~burst~~ bursts ~~including content transmitted in batches in a period of time prior to a pause in~~

~~transmission~~, and said third stream being carried in said first ~~burst~~ bursts and also in said second ~~burst~~ bursts, said receiving method comprising:

a receiver operable to receive said transmission stream partially and selectively during a period at which the first ~~burst~~ bursts or the second ~~burst~~ bursts, being selected by a service recipient, ~~is~~ are transmitted;

an extractor operable to extract said third stream from the first ~~burst~~ bursts or the second ~~burst~~ bursts being received, and storing the extracted third stream; and

a presenting device operable to present said third stream when the service recipient alters the receiving service from the first service presented by the first ~~burst~~ bursts to the second service presented by the second ~~burst~~ bursts, or vice versa,

wherein each of said first ~~burst~~ bursts and said second ~~burst carries~~ bursts carry all data related to ~~information of~~ the first service and the second service as carried in said third stream.

REMARKS

Initially, Applicants would like to thank Examiner Ingvoldstad for his courtesy in conducting a personal interview with Applicants' representatives, Joshua M. Povsner and Nobuo Iida, on October 5, 2009. In the personal interview on October 5, 2009, Applicants' representatives explained features of pending and proposed claims in relation to Applicants' specification, and particularly Figure 12 in Applicants' specification. Applicants' representative also contrasted the features shown in relation to the embodiment of Figure 12 in Applicants' specification with the features disclosed by VERMOLA (U.S. Patent Application Publication No. 2005/0090235), and particularly Figure 13 in VERMOLA. The Examiner provided general suggestions for amending the claims in a manner that would render moot the rejections and objection set forth in the Office Action dated August 6, 2009. The substance of the personal interview is accurately stated in the Examiner's Interview Summary (PTOL-413) dated October 13, 2009.

In a follow-up telephone interview on October 19, 2009, Examiner Ingvoldstad confirmed to Applicants' representative, Joshua M. Povsner, that claim 12 as amended herein would be acceptable in overcoming the rejections set forth in the Office Action.

In the outstanding Office Action, claims 12 and 17-19 were objected-to for perceived informalities. Claims 12-19 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Claims 12-19 were also rejected under 35 U.S.C. §103(a) over YAMAGUCHI (WO 03/073753), in view of VERMOLA (U.S. Patent Application Publication No. 2005/0090235).

Upon entry of the present amendment, each of independent claims 12 and 17-19 will have been amended. Claims 17-19 are amended in a manner consistent with the amendments to claim

12, and therefore consistent with claim 12 as discussed with the Examiner on October 19, 2009. The amendments to claims 12 and 17-19 should not be considered an indication of Applicants' acquiescence as to the propriety of any outstanding rejection. Rather, Applicants have amended claims 12 and 17-19 in order to advance prosecution and obtain early allowance of claims in the present application.

Amended claim 12 is directed to a transmission method for transmitting a plurality of streams in a multiplexed format. The method of claim 12 includes generating a transmission stream through multiplexing of a first stream having data of a first service, a second stream having data of a second service, and a third stream having data related to the first service and data related to the second service. The "data of the first service" and "data of the second service" is distinct from the "data related to the first service" and "data related to the second service" in Applicants' claims. In the embodiment of Figure 12, "data of" each service is shown in the boxes vertically labeled service1, service2, service3, service4 or service 5, whereas "data related to" different services is shown in the smaller boxes embedded within the vertically-labeled boxes.

Additionally, claim 12 recites that the transmission stream has such a structure that first bursts for transmitting the first stream and second bursts for transmitting the second stream are located periodically in the transmission stream. Each vertically-labeled box in Figure 12 is a burst, and a periodic pattern of bursts with the same label, e.g., "service1", provide exemplary support for the bursts for transmitting the first stream or bursts for transmitting the second stream in claim 12.

Claim 12 also recites that each of at least one batch that concludes with a pause in transmission includes one of said first bursts and one of said second bursts. A batch of bursts in

Figure 12 is shown as a single grouping of bursts vertically labeled service1, service2, service3, service4 and service5, and each batch of bursts is shown to conclude with a pause in transmission in Figure 12.

Claim 12 also recites that the third stream is carried in said first bursts and also in said second bursts, and also that the first bursts and second bursts carry all data related to the first service and the second service as carried in said third stream. As noted above, the third stream has data related to the first service and data related to the second service, and in Figure 12 is collectively designated by the smaller boxes embedded within the vertically-labeled boxes. Collectively, the vertically-labeled bursts of a service in Figure 12 carry all data related to the service as carried in the smaller boxes embedded in the vertically-labeled bursts of the service.

Claim 12 has been amended to include revisions similar, but not identical, to the amendments suggested by the Examiner in the objection set forth at pages 2-3 of the Office Action. Claim 12 is also fully supported in the written description of Applicants' application, as confirmed in the follow-up telephone interview on October 19, 2009. Additionally, the combination of features recited in claim 12 are not disclosed or suggested by YAMAGUCHI or VERMOLA, whether considered alone or in any proper combination. Applicants particularly note that VERMOLA does not disclose or suggest the combination of features including batches, bursts, data of, and data related to, as recited in claim 12, and shown by way of example in Figure 12 of Applicants' application. Further, YAMAGUCHI is not applied as disclosing this combination of features. Therefore, modification of YAMAGUCHI with teachings of VERMOLA would not result in the combination of features recited in claim 12. Accordingly, claim 12 is believed allowable.

As set forth above, the documents applied in the Office Action do not disclose the combinations of features recited in Applicants' independent claims 12 and 17-19. Accordingly, independent claims 12 and 17-19 are believed allowable over the documents applied in the Office Action. Claims 13-16 are allowable at least for depending, directly or indirectly, from an allowable independent claim, as well as for additional reasons related to their own recitations.

Any amendments to the claims in this Response, which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should there be any questions, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,
Izumi USUKI et al.

Joshua M. Povsner
Reg. #42,086

Bruce H. Bernstein
Reg. No. 29,027

October 30, 2009
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191